Local Work Instruction:
Noble Discoverer: Ballast Water Discharge – D010

Approved By:
Scope:
Issue Date:
Revision level:

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SCOPE:

This document offers work level instructions for the sampling, testing, and reporting associated with discharge of uncontaminated ballast water while operating under the guidelines of the NPDES General Permit (AKG-28-8100), onboard the *Noble Discoverer*. Uncontaminated ballast water consists of seawater added or removed to maintain the proper vessel stability during all operations.

RESPONSIBILITY:

The M-I SWACO NPDES Compliance Specialist is responsible to ensure that this LWI has been provided to each person prior to conducting this task. Any personnel that may perform the tasks outlined in this document must be familiar with the process, before the rig begins operating under NPDES regulations.

During active drilling operations, the M-I SWACO NPDES Compliance Specialist is responsible for performing the following tasks:

- Document the estimated flow volume.
- Perform and document visual sheen.
- If visual sheen tests cannot be performed, collect and document samples for static sheen tests.
- Collect and document samples for pH analysis.

1.0 References:

1.0 NPDES GP AKG-28-8100:
  1.0.1 Table 11- *Effluent Limitations and Monitoring Requirements for Uncontaminated Ballast Water (D010).*
1.1 Figure 3 – Visual Sheen Test Observation Points (Weston).
1.2 Figure 1 – Discharge Points (Weston).
1.3 Noble Discoverer Best Management Practices, April 2015.
1.4 Noble Discoverer Quality Assurance Project Plan, April 2015.
1.5 M-I SWACO Standard Operating Procedures: 1006, 3004, 3005, 2012, 2001.
1.6 Shell Exploration & Production Company Alaska Venture 2015 Noble Discoverer Waste Management Plan.

2.0 General Requirements:

2.0 The M-I SWACO NPDES Compliance Specialist is responsible for discharge sampling, testing, and reporting to Shell Environmental Department while operating under NPDES GP AKG-28-8100.
2.1 The Shell Environmental Department is responsible for maintaining and submitting to EPA the Discharge Monitoring Report (netDMR) all discharges sampling, testing and results on a monthly basis.
2.2 Noble is responsible for the operation and maintenance of all equipment associated with this discharge.
2.3 Noble is responsible for processing all ballast water contaminated with oil and grease through an oil-water separator.

3.0 Safety Guidelines:

3.0 Before any operations can take place, all personnel involved in this process must complete the following details if required by operator or contractor:

3.0.1 The Pre-Tour Meeting is when daily activities are discussed.

3.0.2 Job Safety Analysis with all involved parties present.

3.0.3 Review Risk Assessment, if applicable.

3.0.4 Noble Permit to Work.

3.1 Appropriate personal protective equipment must be worn at all times.

4.0 Discharge/ Task Description:

4.0 During operations, equipment and supplies will be loaded, unloaded or moved around the vessel, which changes the overall stability of the vessel. In order to maintain safe operating conditions and to ensure proper stability of the vessel, seawater is constantly moved in and out of ballast tanks that are located throughout the entire vessel.

4.1 Noble is responsible for ensuring the correct volume of seawater is loaded, transferred or discharged along with the specific tanks fluid is moved into/out of.

4.2 Noble is responsible for notifying the M-I SWACO NPDES Compliance Specialist prior to any ballast water being discharged so all required samples, tests and documentation can be completed as described in Section 5.0 below.

4.3 The M-I SWACO NPDES Compliance Specialist is responsible for conducting a daily visual sheen test of the receiving waters during daylight hours when ballast water is being discharged.

4.4 M-I SWACO NPDES Compliance Specialist will conducting a static sheen test during night hours if sufficient light isn't available or the receiving water isn't visible. Samples for the static sheen test will be collected directly from a ballast tank or the sample port located on the overboard discharge line, port side, mid-ship in the MCC room.

4.5 If any visual or static sheen test fails, all ballast water will be processed through the OWS per the stipulations of the NPDES GP until the source of the discrepancy is discovered and corrected.

4.6 The M-I SWACO NPDES Compliance Specialist is responsible for recording all visual observations, samples, test results and volumes discharged on the NPDES Master Spreadsheet.

4.7 The M-I SWACO NPDES Compliance Specialist is responsible to submit the NPDES Master Spreadsheet to the Shell Environmental Department so data can be transferred onto the netDMR and sent to the EPA.

4.8 The M-I SWACO NPDES Compliance Specialist will immediately notify Shell Environmental Department at 907-830-7435, of any upset condition.

4.9 For reporting purposes only: Convert cubic meters into gallons1 m^3 = 264.1721 gal.

5.0 Effluent Limitations and Monitoring Requirements - Ballast Water (D010):

Effluent Parameter	Effluent Limitations		Monitoring Requirements	
	Average Monthly Limit	Maximum Daily Limit	Sample Frequency	Sample Type
pH	Report (s.u.)		Monthly	Grab
Free oil	No discharge		Once/discharge	Visual /Grab
Total Volume	Report (gal)		Monthly	Estimate

6.0 Clean-Up:

6.0 Follow housekeeping procedures.

7.0 Contingency:

7.0 Notify rig personnel if any equipment isn't working properly.

Revision Log:

Date:	Document History:	Revised/reviewed by:	Location: